

**PATENT COOPERATION TREATY**  
**PCT**  
**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**  
(Chapter II of the Patent Cooperation Treaty)  
(PCT Article 36 and Rule 70)

REC'D 20 SEP 2005

PCT

Applicant's or agent's file reference PA-106942WO	<b>FOR FURTHER ACTION</b>	See Form PCT/IPEA/416
International application No. <b>PCT/NZ2004/000232</b>	International filing date ( <i>day/month/year</i> ) 27 September 2004	Priority date ( <i>day/month/year</i> ) 25 September 2003
International Patent Classification (IPC) or national classification and IPC <b>Int. Cl.<sup>7</sup> B63C 13/00, B60F 3/00</b>		
Applicant <b>SEALEGS INTERNATIONAL LIMITED et al</b>		

<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 3 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> (<i>sent to the applicant and to the International Bureau</i>) a total of      sheets, as follows:</p> <p style="margin-left: 40px;"><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p style="margin-left: 40px;"><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (<i>sent to the International Bureau only</i>) a total of (indicate type and number of electronic carrier(s))      , containing a sequence listing and/or table related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>	<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I      Basis of the report</p> <p><input type="checkbox"/> Box No. II      Priority</p> <p><input type="checkbox"/> Box No. III      Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV      Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V      Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI      Certain documents cited</p> <p><input type="checkbox"/> Box No. VII      Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII      Certain observations on the international application</p>
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Date of submission of the demand 5 April 2005	Date of completion of the report 8 September 2005
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## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/NZ2004/000232

## Box No. I

## Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1 (b))
- ☐ publication of the international application (under Rule 12.4)
- ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):
- ☒ the international application as originally filed/furnished
- ☐ the description:
- pages as originally filed/furnished
- pages\* received by this Authority on with the letter of
- pages\* received by this Authority on with the letter of
- ☐ the claims:
- pages as originally filed/furnished
- pages\* as amended (together with any statement) under Article 19
- pages\* received by this Authority on with the letter of
- pages\* received by this Authority on with the letter of
- ☐ the drawings:
- pages as originally filed/furnished
- pages\* received by this Authority on with the letter of
- pages\* received by this Authority on with the letter of
- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to the sequence listing (*specify*):
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to the sequence listing (*specify*):

\* If item 4 applies, some or all of those sheets may be marked "superseded."

**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. Statement**

Novelty (N)	Claims 3, 6, 8-9	YES
	Claims 1-2, 4-5, 7, 10-11	NO
Inventive step (IS)	Claims	YES
	Claims 1-11	NO
Industrial applicability (IA)	Claims 1-11	YES
	Claims	NO

**2. Citations and explanations (Rule 70.7)**

- (a) US 5769021
- (b) CA 2273069
- (c) WO 2003/035416

**NOVELTY: CLAIMS 1-2, 4-5, 7, 10-11**

It is considered that each of the above documents clearly disclose amphibious vehicles having retractable leg assemblies as defined in claims 1-2, 4-5, 7, 10-11. These documents do not explicitly instruct that the arrangement of leg and linear actuator should such that the alignment of actuator with the tangent to the arc of travel of the leg is optimised. However, it is considered that a person skilled in the art, when trying to put into effect the invention of any of these citations, would be guided by the drawings thereof. These drawings amount to broad directions as to relative positioning, angling etc of leg and hydraulic ram and it is considered clear that they will lead a person skilled in the art to construct a leg assembly which in terms of practical utility will have all of the features of the above listed claims.

Citations (a) and (c) disclose actuator means for steering leg assemblies and thus the invention defined by claim 6 is not novel in the light of the disclosures of these documents.

**INVENTIVE STEP: CLAIMS 1-11**

Even if it is not agreed that the above documents each disclose optimisation of the angle of the linear actuator with respect to the tangent to the arc of travel of the leg, it is considered that such optimisation would be routinely carried out by a person skilled in the art when putting into effect the inventions disclosed in the above citations, if any problems were encountered with the force level provided by a particular hydraulic system. Consequently it is considered that the invention defined by claims 1-2, 4-5, 7, 10 and 11 (and claim 6 in the case of citations (a) and (c)) is generally lacking in an inventive step in the light of the above citations.

It is considered that a person skilled in the art could readily attach leg and actuator on the one plate, or use balloon tyres, in any of the inventions of the above citations without having to exercise inventive effort and that therefore the inventions of claims 3 and 8 (and of claim 9 in the case of citation (a), where the rear wheels are positioned for use as bumpers) is lacking in an inventive step in the light of citations (a)-(c).